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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mark Grayson

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EXAMINER

SMITH, MARCUS

ART UNIT

PAPER NUMBER

2619

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/648,592	<b>Applicant(s)</b> GRAYSON ET AL.	
	<b>Examiner</b> MARCUS R. SMITH	<b>Art Unit</b> 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13 and 15-21 is/are rejected.
- 7) ☒ Claim(s) 7, 14 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on 2/11/08 is sufficient to overcome the prior art references.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-6, 8-10, 12-13, 15-17, 19-20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maclean et al. (US 7,072,961) in view of Ahvonen et al. (US 7,209,458).

with regard to claim 1, 8, and 15, Maclean teaches:

A method for managing a communications session with a device,  
the method comprising the computer-implemented steps of:

establishing, with the device (mobile terminal), a communications session that supports a first quality of service level (column 6, lines 1-14: step 212);

receiving, at an application server, a request (QoS change request), associated with the device, for a service provided by the application server (step 312: column 6, lines 3-40) ;

determining, at the application server, based upon the request for the service and policy criteria (column 5, lines 38-50: The policy criteria is the user's

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service level agreements.), a second quality of service level to be supported by the communications session for the device (column 6, lines 38-44, the application server determines if the increase or decrease QoS level, a different QoS level than it started with in step 212, which makes any increase in QoS level the second QoS level.); and

Once the application server determines that its okay to increase QoS level, it sends a positive response to the gateway, but it does not state what happens to layer 2 link. Thus, Maclean discloses all of the subject matter as described above except for modifying the communications session by causing a layer-2 change in a communications link used for the communications session, so that the communications session for the device supports the second quality of service level instead of the first quality of service level.

Ahvonon et al. teaches a policy control function that determines QoS level for a mobile device (column 7, lines 5-19) similar to Maclean's system. However the Ahvonon teaches the PCF send decision (response in Maclean's system) to the gateway, and the gateway enforces the QoS level determined by PCF by modify (upgrade or downgrade) the QoS level of the PDP context (column 7, lines 20-30) in order to consistently and efficiently control QoS allocation in a radio network (column10, lines 11-20).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to modify the communication session as taught by Ahvonon in the system of Maclean in order to consistently and efficiently control QoS allocation.

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with regard to claim 2, 9, and 16, Ahvonen teaches:

The method as recited in Claim 1, wherein:

the request for the service is received from a layer-2 gateway (column 7, lines 5-13); and

causing a layer-2 change in a communications link used for the communications session, so that the communications session for the device supports the second quality of service level includes signaling the layer-2 gateway to change the communications session with the device to support the second quality of service level (column 7, lines 20-30).

with regard to claim 3, 10, and 17, Ahvonen teaches:

The method as recited in Claim 1, wherein causing a layer-2 change in a communications link used for the communications session, so that the communications session for the device supports the second quality of service level, includes causing the modification of session context data at a layer-2 gateway (column 7, lines 20-30).

with regard to claim 5, 12, and 20, :

The method as recited in Claim 1, wherein the first and second quality of service levels each specifies an amount of bandwidth to be allocated to the device (Inherent. It well known in the art the different QoS level have different bandwidth in multimedia networks).

with regard to claim 6, 13, and 21, Maclean teaches :

The method as recited in Claim 1, wherein the device is a wireless device (mobile terminal see figure 1).

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with regard to claim 19, Ahvonen:

The apparatus as recited in Claim 18, wherein the apparatus further comprises means for specifying the quality of service profile for the second quality of service level using a vendor-specific attribute containing the 3<sup>rd</sup> Generation Partnership Project 3GPP- Negotiated-QoS attribute (column 1, lines 47-55).

4. Claims 4, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maclean and Ahvonen as applied to claims 1/8/15 above, and further in view of Amin et al.

Maclean and Ahvonen discloses all of the subject matter as described above except for generating and sending to a layer-2 gateway an Authentication, Authorization, and Accounting Change of Authorization (CoA) Request command that specifies a quality of service profile for the second quality of service level.

Amin et al. teaches a system in figure 16 that a policy server (similar to Ahvonen) that informs the RAN on QoS level change (column 24, lines 45-55). Then RAN generates the QoS change into accounting message to send to the AAA server (column 7, lines 60-63) in order to store the new QoS level to user profile more efficiently.

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made for the RAN to generate the QoS change into accounting message to send to the AAA server as taught by Ahvonen in the combination system of Maclean and Ahvonen in order to store the new QoS level to user profile more efficiently.

***Allowable Subject Matter***

5. Claims 7, 14, and 22 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-6, 8-13, 15-22 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS R. SMITH whose telephone

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number is (571)270-1096. The examiner can normally be reached on Mon-Thurs: 7:30 am - 5:00 p.m. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 5/21/08

/CHAU T. NGUYEN/

Supervisory Patent Examiner, Art Unit 2619